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| Appl | ication | <b>Contro</b> | No. |
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|      |         |               |     |

AHMED ELALLAM

Applicant(s)/Patent under Reexamination

10/632,519

HELMY ET AL.

Examiner

2616

✓ Rejected= Allowed

(Through numeral)
Cancelled

Non-Elected

Appeal

÷ Restricted

I Interference

O Objected

|                 |  | L                                       | L        |          |          |              | J            |  | Щ  | <u> </u> |
|-----------------|--|---|----------|----------|----------|--------------|--------------|--|--|----------|
| Cla             | im   | Date                                    |          |          |          |              |              |  |  |          |
| Lie             | 11111  | Date                                    |          |          |          |              |              |  |  |          |
| Final           | Original                                     | 12/25/06                                |          |          |          |              |              |  |  |          |
|                 | 1  |   | $\vdash$ |          |          | ┝            | <del> </del> | $\vdash$   | ⊢  | Н        |
|                 | 1<br>2<br>3<br>4<br>5<br>6                   | V<br>V<br>V<br>V<br>V<br>V<br>V<br>V    | -        | -        | -        | ╁╌           | H            |  | ┢  | Н        |
|                 | 2  | ₩                                       | ┝        | ⊢        | ┢        | ╁            | ┢            | $\vdash$   | ⊢  | $\vdash$ |
|                 | 4  | ₩                                       | ⊢        | ⊢        |          | ┢            | ╁            | -  | -  | Н        |
| $\vdash$        | 5  | V                                       | -        | ┝        | -        | <del> </del> | ⊢            |  | ┢  | Н        |
|                 | 6  | v                                       | -        | -        | -        |              | ╁            | Η.   | <del>  -</del>                                   | Н        |
| $\vdash$        | 7  | v                                       | -        | -        | -        | ┢            | $\vdash$     | -  | $\vdash$   | Н        |
|                 | 8  | Ϊ́                                      | $\vdash$ | ┢        | ┢        | H            | ┢            | $\vdash$   | $\vdash$   | Н        |
|                 | 8<br>9                                       | V                                       | $\vdash$ | $\vdash$ | $\vdash$ |              | -            | H  | <del>                                     </del> | Н        |
|                 | 10   | v                                       | H        | H        | $\vdash$ | 1            |              | H  | -  | Н        |
|                 | 11   | V                                       | $\vdash$ | ┢        |          | $\vdash$     |              | <del>                                     </del> | -  | Н        |
| -               | 12   | Ė                                       |          | _        | -        |              |              |  | ┢  | $\vdash$ |
|                 | 13   | v                                       |          | H        | $\vdash$ |              | $\vdash$     |  |  | Н        |
|                 | 13<br>14<br>15                               | V                                       |          |          |          | <u> </u>     | _            | ŀ  |  | H        |
|                 | 15   | V                                       |          |          | <u> </u> | $\vdash$     |              | $\vdash$   |  | H        |
|                 | 16   | V                                       |          | $\vdash$ | ┢        | ┢            | ┪            | _  |  | $\vdash$ |
|                 | 17   | v                                       | _        |          | 1        |              | $\vdash$     | 1  |  |          |
|                 | 18   | v                                       | _        |          |          | $\vdash$     |              |  |  | П        |
|                 | 19   | v                                       |          |          | _        |              | t            |  |  | Н        |
|                 | 20   | v                                       |          |          |          |              | <u> </u>     |  | _  | Н        |
|                 | 21   | v                                       |          |          | _        | T            | $\vdash$     |  | _  | H        |
|                 | 22   | V                                       |          |          |          | 1            | -            |  |  | М        |
|                 | 16<br>17<br>18<br>19<br>20<br>21<br>22<br>23 | V                                       |          |          |          |              |              |  |  | Ħ        |
|                 | 24   | V                                       |          |          |          |              |              |  | -  |          |
|                 | 24<br>25<br>26                               | >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>> |          |          |          |              | T            | _  |  | П        |
|                 | 26   | V                                       |          |          |          | Г            |              |  | _  |          |
|                 | 27   | V                                       |          |          |          |              |              |  |  |          |
|                 | 27<br>28<br>29<br>30<br>31                   | V                                       |          |          |          |              |              |  |  | П        |
|                 | 29   | ~                                       |          |          |          |              |              |  |  | П        |
|                 | 30   |   |          |          |          |              |              |  |  |          |
|                 | 31   |   |          |          |          |              |              |  |  |          |
|                 | 32   |   |          |          |          |              |              |  |  |          |
|                 | 32   |   |          |          |          |              |              |  |  |          |
|                 | 34   |   |          |          |          | _            |              |  |  |          |
|                 | 35<br>36                                     |   |          |          |          | _            |              |  | _  | Ш        |
|                 | 36   |   |          |          | <u> </u> | 匚            | Щ            |  | L  | Ш        |
|                 | 37   |   |          |          |          |              |              |  |  | Ш        |
| $\sqcup$        | 38<br>39                                     |   |          |          | _        | L_           |              | _  |  | Ш        |
| ļļ              |  | Ш                                       |          |          |          | _            |              |  | lacksquare                                       | Ш        |
|                 | 40   | Ш                                       |          |          | _        | L.           |              |  |  | Ш        |
|                 | 41   | Щ                                       |          | _        |          | L            | _            | _  |  | Ш        |
| $\vdash$        | 42   | Ш                                       | Ш        |          | _        | _            | <u> </u>     |  | _  | Щ        |
| $\vdash$        | 43   | $\vdash$                                |          |          |          | <u> </u>     | <u> </u>     |  | L.,  | Ц        |
| <b>—</b>        | 44   |   | Щ        | _        |          | oxdot        | Щ            | Щ.   | <u> </u>   | Щ        |
| $\vdash$        | 45   | $\Box$                                  | ш        |          |          | <u> </u>     |              |  |  | Щ        |
| <b>  </b>       | 46   | $\vdash$                                | $\Box$   |          | _        | H            |              | Щ  | L  | Щ        |
| $\vdash$        | 47   | $\vdash$                                |          |          |          | $\vdash$     | Щ            | $\Box$   | _  | Ц        |
| $\vdash \dashv$ | 48   | -                                       |          |          |          |              | Ь            |  |  | Н        |
| $\vdash$        | 49   | $\Box$                                  | _        | Щ        |          | L.           | <u> </u>     | $\Box$   |  | Ш        |
|                 | 50   |   |          |          |          |              |              |  |  |          |

| Cla      | Claim       |          |                | Date     |  |              |  |  |  |                 |  |  |
|----------|-------------|----------|----------------|----------|--|--------------|--|--|--|-----------------|--|--|
|          |             |          | Γ              |          |  |              |  |  |  |                 |  |  |
| <u></u>  | Original    |          | 1              |          |  | ŀ            |  |  |  |                 |  |  |
| Final    | ij          |          |                | 1        | ŀ  | ľ            |  |  |  |                 |  |  |
| -        | Ō           |          |                | 1        | İ  |              |  |  |  |                 |  |  |
| -        | 51          | ⊢        | ⊢              | ┢        | ┝  | $\vdash$     | ╁  |  | ╁╾   | ╁               |  |  |
| -        | 51          | ⊢        | ⊢              | ┢        | ┢  | ┢            | ╁  |  | ⊬  | ├               |  |  |
|          | 52<br>53    | -        | -              | ┼        | -  | ⊢            | ├  | <del> </del>                                     | ├_   | ⊢               |  |  |
| -        | 53          | <u> </u> | <u> </u>       | ╄        | ┡  | ļ            | <u> </u>   | ⊢  | ┡  |                 |  |  |
| $\vdash$ | 54          | _        | _              | ┞        | ┡  | <u> </u>     | <u> </u>   | <u> </u>   | ┞  | -               |  |  |
|          | 55          | _        | L              | _        |  | L            | <u> </u>   | L  |  | ļ               |  |  |
|          | 56          | L        | _              | L        | _  | L            | <u> </u>   |  | L  |                 |  |  |
|          | 57          | L        | $oxed{oxed}$   | <u> </u> | L  | L            | L  |  | L  |                 |  |  |
|          | 58          |          |                |          |  |              |  |  |  |                 |  |  |
|          | 59          |          |                |          |  |              |  |  | П  |                 |  |  |
|          | 60          |          |                |          |  | Γ            | Γ  |  |  |                 |  |  |
|          | 61          |          | Г              |          |  | П            |  |  | Г  |                 |  |  |
|          | 62          | Г        | Ι-             | Π        | Ι  | Π            | Г  |  | T  | П               |  |  |
|          | 63          | ┢        | Т              |          | Т  | <b></b>      | T-   | $\vdash$   | Т  | П               |  |  |
|          | 64          | $\vdash$ | T              | t        |  | $\vdash$     | $\vdash$   | $\vdash$   | T  | Н               |  |  |
| $\vdash$ | 65          | $\vdash$ | $\vdash$       | $\vdash$ |  |              |  | <del>                                     </del> | $\vdash$   | Н               |  |  |
| $\vdash$ | 66          | -        | $\vdash$       | $\vdash$ | $\vdash$   | $\vdash$     | $\vdash$   | -  | <del>                                     </del>   | $\vdash$        |  |  |
|          | 67          | -        | $\vdash$       | ├-       | -  | -            | ├-   | $\vdash$   | ⊢  | $\vdash$        |  |  |
| -        |             | H        | -              | ⊢        | -  | H            | ⊢  | -  | ├-   | $\vdash$        |  |  |
| $\vdash$ | 68          | <u> </u> | <u> </u> -     | ⊢        | -  | <u> </u>     | <u> </u>   | ļ  | _  | -               |  |  |
| -        | 69          | <u> </u> | <u> </u>       | ▙        | <u> </u>   | <u> </u>     | <u> </u>   | ┞  | <u> </u>   | <u> </u>        |  |  |
|          | 70          |          | <u> </u>       | Ļ        | <u> </u>   | ᆫ            | ᆫ  | <u> </u>   | <u> </u>   |                 |  |  |
|          | 71<br>72    | 匚        | 匚              | _        | _  | 匚            | 乚  | ᆫ  | L  | Ш               |  |  |
|          | 72          |          |                |          | L  |              |  |  | L  |                 |  |  |
|          | 73          |          |                |          |  |              |  | <u> </u>   |  |                 |  |  |
|          | 74          |          |                |          |  |              |  |  |  |                 |  |  |
|          | 75          |          |                |          |  |              |  |  |  |                 |  |  |
|          | 76          |          |                |          |  |              |  |  |  |                 |  |  |
|          | <b>77</b> · |          |                |          |  |              |  |  |  | П               |  |  |
|          | 78          |          |                |          |  |              |  |  |  | П               |  |  |
|          | 79          | $\vdash$ | $\vdash$       |          |  |              |  | $\vdash$   |  | Н               |  |  |
|          | 80          | $\vdash$ | $\vdash$       | $\vdash$ | -  | _            | -  | -  | _  | Н               |  |  |
|          | 81          |          | -              | _        | ├  | -            |  |  | ┢  | Н               |  |  |
| $\vdash$ | 82          | -        | $\vdash$       | ┰        | $\vdash$   | $\vdash$     | $\vdash$   | $\vdash$   | $\vdash$   | Н               |  |  |
| -        | 83          |          | -              | -        | <del>                                     </del> | $\vdash$     |  | $\vdash$   |  | ^               |  |  |
|          |             | <u> </u> | -              |          | <del>                                     </del> | $\vdash$     | <del> </del>   | $\vdash$   | <del> -</del>  | H               |  |  |
| $\vdash$ | 84          |          | <del> </del> — | -        | <u> </u>   | $\vdash$     | $\vdash$   | <del> </del>                                     | $\vdash$   | Н               |  |  |
| $\vdash$ | 85          | <u> </u> | <u> </u>       | -        | <u> </u>   | <del> </del> | $\vdash$   | <u> </u>   | <u> </u>   | $\vdash$        |  |  |
| $\vdash$ | 86          | <u> </u> |                | <u> </u> | <u> </u>   | ⊢            |  | Ŀ  | L  | $\sqcup$        |  |  |
|          | 87          | _        | _              |          | _  | L            | <u> </u>   |  | _  | Ш               |  |  |
|          | 88          |          | <u> </u>       |          | _  | L            | <u> </u>   | Ш  | $ldsymbol{ld}}}}}}$ | Ш               |  |  |
|          | 89          |          | _              | 匚        | <u> </u>   | L            | <u> </u>   | _  | <u> </u>   | Ш               |  |  |
|          | 90          |          | L              |          |  | _            |  |  |  | Ш               |  |  |
|          | 91          |          | oxdot          |          |  |              | $oldsymbol{ol{ol{ol}}}}}}}}}}}}}}}}}}$ |  |  |                 |  |  |
|          | 92          |          |                |          |  |              |  |  |  |                 |  |  |
|          | 93          |          |                |          |  |              |  |  |  |                 |  |  |
|          | 94          |          |                |          |  |              |  |  |  |                 |  |  |
|          | 95          |          |                |          |  |              |  |  |  | $\sqcap$        |  |  |
|          | 96          |          |                |          |  |              |  |  |  | H               |  |  |
|          | 97          |          | Т              |          |  |              | Н  | Н  | $\vdash$   | $\vdash$        |  |  |
|          | 98          |          | т              |          | _  | $\vdash$     |  | -  | $\vdash$   |                 |  |  |
|          | 99          | $\vdash$ | $\vdash$       | -        | _  |              | Н  | $\vdash$   | $\vdash$   | $\vdash \vdash$ |  |  |
| $\vdash$ | 100         | _        | -              | -        |  | -            | $\vdash$   | $\vdash$   | $\vdash$   | $\vdash \vdash$ |  |  |
| 1 1      | IUU         |          | 1              | ı I      |  |              |  |  |  | i I             |  |  |

| Cla                    | aim               | Γ            |  |  |              | Date     | e            |          |          |              |
|------------------------|-------------------|--------------|--|--|--------------|----------|--------------|----------|----------|--------------|
|                        |                   |              |  |  |              |          |              | Г        |          |              |
| Final                  | Original          |              |  |  |              |          |              | İ        |          | İ            |
| l                      | rig               | l            |  |  |              |          |              |          |          |              |
| <b>-</b>               | Õ                 |              |  |  | İ            |          |              |          |          |              |
| -                      | 101               | $\vdash$     | -  | ⊢  | ┝            | ⊢        | -            | ⊢        | ├─       | ⊢            |
|                        | 101<br>102        | ⊢            | ├-   | }—   | ├-           | <b>!</b> | ├-           | <u> </u> | ⊢        | <u> </u>     |
|                        | 102               | ├            | _  | <u> </u>   | <u> </u>     | <u> </u> | <u> </u>     | _        | ऻ_       |              |
|                        | 103               | $oxed{oxed}$ | L  | <u> </u>   | L_           | Ŀ        | L.           | _        | _        |              |
|                        | 104               | <u></u>      |  | L  | $oxed{oxed}$ | L        |              | _        |          |              |
|                        | 105               |              |  | ١  |              | l        |              |          |          |              |
|                        | 106               | l.           | l  | ١.   | ١.           | l        |              |          |          |              |
|                        | 107               |              | Г  | Г  |              |          |              |          | П        |              |
|                        | 108               |              |  |  |              | Г        |              | П        |          |              |
|                        | 109               |              |  |  |              |          | Г            |          | Г        |              |
|                        | 110               |              |  | _  |              |          | _            | Г        | _        | $\vdash$     |
| <del> </del>           | 111               | $\vdash$     |  | $\vdash$   | $\vdash$     | _        |              |          | $\vdash$ | $\vdash$     |
| $\vdash$               | 112               |              | <del>                                     </del> | <del>                                     </del> | -            | $\vdash$ | $\vdash$     | $\vdash$ | -        | $\vdash$     |
| ├─                     | 113               | $\vdash$     | ⊢  | $\vdash$   | ├            | $\vdash$ | ├            |          | $\vdash$ |              |
| <b> </b>               | 114               | $\vdash$     | $\vdash$   | -  | -            |          | <del> </del> | -        | $\vdash$ | -            |
|                        | 114               | <u> </u>     | ├  | -  | -            | -        | <del> </del> | <u> </u> | <u> </u> | <del> </del> |
|                        | 115               | _            | <u> </u>   | <u> </u>   | <u> </u>     | <u> </u> | _            |          | ├        | -            |
|                        | 116               | _            | L  | <u> </u>   | <u> </u>     | <u> </u> |              | _        | L_       |              |
|                        | 117               |              | _  |  | <u> </u>     | 乚        |              |          |          |              |
|                        | 118               |              |  |  |              | 匚        |              |          |          |              |
|                        | 119               |              |  |  |              |          |              |          |          |              |
|                        | 120               |              |  |  |              |          |              |          |          |              |
|                        | 121               |              |  |  |              |          |              |          |          |              |
|                        | 121<br>122        |              |  |  |              |          |              |          |          |              |
|                        | 123               |              |  |  |              |          |              |          |          |              |
|                        | 124               |              |  |  |              |          |              | Г        |          | П            |
|                        | 123<br>124<br>125 |              | <del>                                     </del> |  |              | Т        |              | _        |          | Н            |
|                        | 126               | _            |  | H  |              |          | _            | $\vdash$ | _        |              |
|                        | 126<br>127<br>128 | _            | ┢  | 1  |              | -        | -            | $\vdash$ |          | Н            |
|                        | 128               | _            | $\vdash$   | ⊢  | _            | $\vdash$ | ⊢            | $\vdash$ | ⊢        | Н            |
|                        | 120               | H            | -  | -  | -            | -        | -            | -        | -        | -            |
|                        | 129<br>130        | _            | ⊢  | $\vdash$   | -            | -        | -            | $\vdash$ | ⊢        | $\vdash$     |
|                        | 130               |              |  | H  | ⊢            | $\vdash$ | -            | ┝        | ⊢        | Н            |
| $\vdash$               | 131               |              | <b> </b>   | _  | ┝            | L        | _            | ┡        | L        | Н            |
|                        | 132<br>133        |              | _  | L  |              | _        |              | _        |          | ш            |
|                        | 133               | _            |  |  |              | _        |              | <u> </u> |          |              |
|                        | 134               |              | L  | L_   | L.,          | _        |              | _        |          |              |
|                        | 135               |              | L.   | <u> </u>   | <u> </u>     |          |              | L        |          | Ш            |
|                        | 136               |              | L_   | L  |              |          |              |          | _        |              |
| Ш                      | 137<br>138        |              | L  | L  |              |          |              |          |          | Ш            |
|                        | 138               | _            |  | L  |              |          |              |          |          |              |
|                        | 139               |              |  |  |              |          |              |          |          |              |
|                        | 140               |              |  |  |              |          |              |          |          |              |
|                        | 141               |              |  |  |              |          |              |          |          |              |
|                        | 142               |              |  |  |              |          |              |          |          |              |
|                        | 143               |              |  | Г  |              |          |              |          |          |              |
|                        | 144               |              |  |  |              |          |              |          |          |              |
|                        | 145               |              | $\vdash$   | Г  |              | П        |              |          |          | $\neg$       |
| $\vdash \vdash$        | 146               |              | $\vdash$   |  | т            | $\vdash$ |              | _        |          | $\dashv$     |
| $\vdash$               | 147               |              | <del> </del>                                     |  |              | Н        |              |          | _        | $\dashv$     |
|                        | 148               |              |  | -  | -            | $\vdash$ | -            | $\vdash$ |          |              |
| $\vdash$               | 149               |              | -  | $\vdash$   | -            | $\vdash$ | -            | Н        |          | $\dashv$     |
| $\vdash \vdash \vdash$ | 150               |              | -  | $\vdash$   | -            |          | -            | Н        |          | $\dashv$     |
|                        | 150               |              |  | L  |              | Ш        |              | Щ        |          |              |